|   | Application No.  | Applicant(s)   | a. A                      |
|---|--|--|---------------------------|
| Notice of Allowability  | 10/784,047   | MUKKER ET AL.  |                           |
|   | Examiner   | Art Unit   |                           |
|   | Dang T. Nguyen   | 2824   |                           |
| The MAILING DATE of this communication appearable claims being allowable, PROSECUTION ON THE MERITS IS (0 herewith (or previously mailed), a Notice of Allowance (PTOL-85) of NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGOR THE Office or upon petition by the applicant. See 37 CFR 1.313 and A. This communication is respectively as 42 May 2005.  | OR REMAINS) CLOSED in<br>or other appropriate commu<br>GHTS. This application is su  | this application. If not include<br>nication will be mailed in due   | ed<br>course, <b>THIS</b> |
| 1. This communication is responsive to 12 May 2005.   |  |  |                           |
| 2. The allowed claim(s) is/are <u>1,3-13,15-20,22-32,34-39 and 4</u>  | <u>1-44</u> .  |  | •                         |
| 3. $\boxtimes$ The drawings filed on <u>02 May 2005</u> are accepted by the Exa   | miner.   |  |                           |
| 4. Acknowledgment is made of a claim for foreign priority und a) All b) Some* c) None of the:  1. Certified copies of the priority documents have be completed as a claim for foreign priority und complete as a copies of the priority documents have be copies of the certified copies of the priority documents have be copies of the certified copies of the priority document international Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONME THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  5. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which gives are completed by the Notice of Draftsperson (a) including changes required by the Notice of Draftsperson (b) including changes required by the attached Examiner's Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1.8 each sheet. Replacement sheet(s) should be labeled as such in the capital properties. | been received. been received in Application uments have been received  f this communication to file ENT of this application.  ted. Note the attached EXA s reason(s) why the oath or be submitted. on's Patent Drawing Review Amendment / Comment or  84(c)) should be written on the header according to 37 CFI it of BIOLOGICAL MATE | in No in this national stage applica a reply complying with the rec MINER'S AMENDMENT or N declaration is deficient.  ( PTO-948) attached in the Office action of the drawings in the front (not the R 1.121(d).  ERIAL must be submitted. I | quirements IOTICE OF      |
| Attachment(s)  1. ☑ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08 Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material   | 6. Interview Su<br>Paper No./<br>7. Examiner's   | formal Patent Application (PTourmary (PTO-413), Mail Date Amendment/Comment Statement of Reasons for Allo  | owance  Aguren            |

U.S. Patent and Trademark Office PTOL-37 (Rev. 1-04) Application/Control Number: 10/784,047

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# Response to Amendment

1. This office action is in response to applicant's amendment received on 5/12/05. Claims 1, 13, 20, 32, and 39 have been amended. Claims 2, 14, 21, 33, and 40 have been canceled. Claims 1 - 44 are pending on this application. Claims 1, 13, 20, 32, and 39 are independent claims.

## **Drawings**

2. New drawings were received on May 2, 2005 and have been approved by the Examiner. These drawings are substituted the original set of drawings filed on February 19, 2004.

#### **EXAMINER'S AMENDMENT**

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claim 3 line 1 changes "2" To - -1- -

Claim 5 line 1 changes "2" To - -1- -

Claim 7 line 1 changes "2" To - -1 - -

Claim 15 line 1 changes "14" To - -13- -

Claim 22 line 1 changes "21" To - -20- -

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Claim 24 line 1 changes "21" To - -20- -

Claim 26 line 1 changes "21" To - -20- -

Claim 34 line 1 changes "33" To - -32- -

Claim 41 line 1 changes "40" To - -39- -

## Allowable Subject Matter

- 4. Claims 1, 3-13, 15-20, 22-32, 34-39, 41-44 are allowed.
- 5. The following is an examiner's statement of reasons for allowance:

With respect to claim 1, in addition to other elements in the respective claim, the prior art fails to teach or suggest "activating being a consequence of a first signal's indication of a first clock cycle of a plurality of consecutive clock cycles, a memory read phase being performed by the memory controller over the plurality of clock cycles, the first read of information occurring within the plurality of clock cycles".

With respect to claims 13, 32, and 39, in addition to other elements in the respective claim, the prior art does not teach or suggest "the memory controller logic circuitry comprising a latch, the latch to latch a first value, the first value to place the termination loads in the activated state, the latch to also provide a second value, the second value to place the termination loads in the deactivated state".

With respect to claim 20, in addition to other elements in the respective claim, the prior art does not teach or suggest "activating being a consequence of a first signal's indication of a first clock cycle of a plurality of consecutive clock cycles, a DDR

memory read phase being performed by the memory controller over the plurality of clock cycles, the first read of information occurring within the plurality of clock cycles".

- 5. The prior art made of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations. Bonella et al. and Merritt taken individually or in combination, do not teach the claimed invention of activating consequence of a first signal's indication of a first clock cycle of a plurality of consecutive clock cycles; and the latch of the first value to place the termination loads in activated state, and the second value in the deactivated state, in combination with other limitations.
- 6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### **Contact Information**

7. Any inquiry concerning this communication from the examiner should be directed to Dang Nguyen, who can be reached by telephone at (571) 272-1955. Normal contact times are M-F, 8:00 AM - 4:30 PM.

Upon an unsuccessful attempt to contact the examiner, the examiner's supervisor, Richard Elms, may be reached at (571) 272-1869.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist, whose telephone number is (703)

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305-3900. The faxed phone number for organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the Status of an application may be obtained from the patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or EBC@uspto.gov.

Dang Nguyen 5/13/2005

VANTHUNGUYEN PRIMARY EXAMINER

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